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CLAIMS

What is claimed is:

1. A method for recovering data transmitted over a plurality of channels in a wireless code division multiple access communication system, the method comprising:

receiving the plurality of channels as a received signal, each channel associated with a code;

subtracting for each of the plurality of channels others of the plurality of channels from the received signal and despreading a result of that subtracting as data for that channel.

2. The method of claim 1 wherein the subtracting others of the plurality of channels including for each channel:

despreading the received signal with the others channels codes; respreading the despread others channel codes using the other channels codes; and subtracting from the received signal the respread other channels.

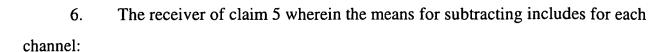
- 3. The method of claim 2 wherein the despreading is performed by a mixer.
- 4. The method of claim 2 wherein the despreading is performed by a matched filter.
- 5. A receiver for recovering data transmitted over a plurality of channels in a wireless code division multiple access communication system, the receiver comprising:

means for receiving the plurality of channels as a received signal, each channel associated with a code;

means for subtracting for each of the plurality of channels, others of the plurality of channels from the received signal and despreading a result of that subtracting as data for that channel.

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means for despreading the received signal with the others channels codes; means for respreading the despread others channels codes; and means for subtracting from the received signal the respread other channels.

- 7. The receiver of claim 2 wherein the despreading means is a mixer.
- 8. The receiver of claim 2 wherein the despreading means is a matched filter.
- 9. A receiver for recovering data transmitted over a plurality of channels in a wireless code division multiple access communication system, the receiver comprising:

an input configured to receive the plurality of channels as a received signal, each channel associated with a code; and

for each of the plurality of channels, a subtractor for subtracting others of the plurality of channels from the received signal and despreading a result of that subtracting as data for that channel.

10. The receiver of claim 9 further comprising:

for each channel, a first mixer operatively coupled to the input for despreading the received signal with that channel code;

for each channel, a second mixer for respreading that channel despread signal; and wherein for each channel, the subtractor subtracts from the received signal the respread channels other than that channel.

11. The receiver of claim 9 further comprising:

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for each channel, a matched filter operatively coupled to the input for despreading the received signal with that channel code;

for each channel, a mixer for respreading that channel despread signal; and wherein for each channel, the subtractor subtracts from the received signal the respread channels other than that channel.